

April 13-16 “Climbing to Petascale at NCCS/NICS on XT5” – Draft Agenda

First Day Morning

Time	Session Topic	Presenter(s)
8:00 - 8:30 am	Morning coffee - to allow participants to discuss their work for the day1s meeting, speakers to Check slides, session chairs to finalize introductions, registration pickup for late arrivals.	
8:30 – 8:45 am	Welcome and Introduction to the Workshop	Douglas Kothe, NCCS
8:45 – 9:15am	Overviews of NCCS/NICS XT5 Systems - NCCS/NICS staff	NCCS/NICS staff – Bruce Loftis, NICS, Don Frederick, NCCS
9:15 – 10:15	Cray Roadmap Update	John Levesque, Cray
10:15 -10:30	Break	
10:30 – 11:30	Introduction to OpenMP	Rebecca Hartman-Baker, NCCS
11:30 – Noon	Cray XT Architecture - detailed description of Cray XT5 systems, including interconnect and node structure	John Levesque, Cray
Noon - 1:00 pm	Working lunch – review of morning materials, Question and Answers; Presentation on application experience on XT systems : User Experience Speaker – ‘A First Look at the Chapel HPC language’,	Brad Chamberlin, Cray
1:00 – 3:00 pm	Cray Compilers	Nathan Wichman, Cray

3:00 – 3:15 pm	Break	
3:15 – 4:15	Architecture of the AMD Quad Core CPUs	Brian Waldecker, AMD
4:15 – 5:00 pm	Introduction to Using NCCS/NICS Cray XT5 Systems - NCCS/NICS staff	NCCS/NICS staff

April 13-16 Climbing to Petascale at NCCS/ORNL – Agenda Second Day Morning

Time	Session Topic	Presenter(s)
8:00 am	Working breakfast to allow participants to discuss their work for the day's meeting, Continue working on previous day's assignment	
8:30 – 9:30 am	Using PGI Compilers on XT5	Brent Leback, Dave Norton, PGI
9:30 - 10:15 am	Optimizations for the Cray XT5	Jeff Larkin, Cray
10:15 – 10:30	Break	
10:30 – 11:30	How to Make Best use of Cray MPI	Kim McMahon, Cray
11:30 – Noon	How to Make Best use of Cray OS Features	Kitrick Sheets, Cray
Noon - 1:00 pm	Working lunch - obtain user account information; log onto system; compile applications. Finish first day assignment. User application experience presentation: User Experience Presentation – "Task-oriented Computing in MADNESS" Scott Thornton, Univ. of TN	
1:00 pm – 1:30	The Cray Scientific Libraries	Keita Teranishi, Cray
1:30 -2:15	Using Cray MP – Tips & Tricks from Application	Mark Fahey, NICS

1:30 -2:15	Using Cray MP – Tips & Tricks from Application Experiences	Mark Fahey, NICS
2:15 – 3:00 pm	Using Craypat to profile applications and measure application performance on theXT5	Luiz DeRose, Cray
3:00 – 3:15 pm	Break	
3:15 – 5:00 pm	Second Day Afternoon Assignment optimize your application for node performance-	NCCS/NICS/Cray Staff

Third Day Morning

8:00 – 8:30	Working breakfast to allow participants to discuss their work for the day1s meeting, speakers to Check slides, session chairs to finalize introductions, pickup for late arrivals. Continue working on previous day’s assignment -	
8:30- 9:30 am	Introduction to Lustre and NCCS Spider Parallel file systems for XT5	Galen Shipman, NCCS
9:30 – 10:30	Using I/O on Cray XT Systems	Lonnie Crosby, NCCS & Jeff Larkin, Cray
10:30-10:45	Break	
10:45 – Noon	Parallel Analysis and Visualization on the Cray Linux Environment.	David Pugmire, NCCS
Noon – 1:00	Working lunch - User application experience presentation: Performance Measurement with CrayPAT,	Luiz DaRose, Cray
1:00 – 2:00	Petascale Case Study	TBA

2:00 – 3:30	Third Day Afternoon Attendees port/run/measure/scale code	NCCS/NICS/Cray staff
3:30 -3:45	Break	
3:45 – 5:00	Third Day Afternoon Attendees port/run/measure/scale code	NCCS/NICS/Cray staff

Fourth Day Morning

8:00 – 8:30	Working breakfast to allow participants to discuss their work for the day's meeting, Continue working on previous day's assignment	
8:30 – 10:30	Hands-on Session in conjunction with NCCS/NICS/Cray staff	NCCS/NICS/Cray staff
10:30 – 10:45	Break	
10:45 – Noon	Hands-on Session in conjunction with NCCS/NICS/Cray staff	NCCS/NICS/Cray staff
Noon – 1 PM	Working lunch - User application experience presentation: User Experience Presentation - TBA	
1:00 – 3:00 PM	Hands-on Session in conjunction with NCCS/NICS/Cray staff	NCCS/NICS/Cray staff
3:00 -3:15 pm	Break	
3:15 – 5:00 pm	Hands-on Session in conjunction with NCCS/NICS/Cray staff	NCCS/NICS/Cray staff
5:00 PM	Adjourn	